

Appl. No. 10/768,069
Amendment dated: March 28, 2005
Reply to OA of: December 29, 2004

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1(currently amended). A method for forming a bottle shaped trench, said method comprising steps of:

providing a substrate;

forming a plurality of operation layers on said substrate;

forming a photoresist layer on said operation layers to define a predetermined position;

forming a trench at said predetermined position, said trench having a sidewall;

implanting predetermined material particles into an upper portion of ~~[[the]]~~ said sidewall of ~~[[the]]~~ said trench, said material particles reducing ~~[[the]]~~ said oxidability of ~~[[the]]~~ said sidewall of the trench;

oxidizing ~~[[the]]~~ said sidewall of ~~[[the]]~~ said trench to form an oxide layer, ~~the portion of~~ ~~[[the]]~~ said oxide layer formed at ~~[[the]]~~ said upper portion of ~~[[the]]~~ said sidewall implanted with ~~[[the]]~~ said material particles ~~[[is]]~~ being thinner than ~~the portion of~~ ~~[[the]]~~ said oxide layer formed at the other portion of ~~[[the]]~~ said sidewall not implanted with ~~[[the]]~~ said material particles; and

removing said oxide layer to form a bottle shaped trench.

2(original). The method as claimed in Claim 1, wherein the material particles are implanted by tilt implantation.

3(original). The method as claimed in Claim 1, wherein the material particle are nitrogen ions.